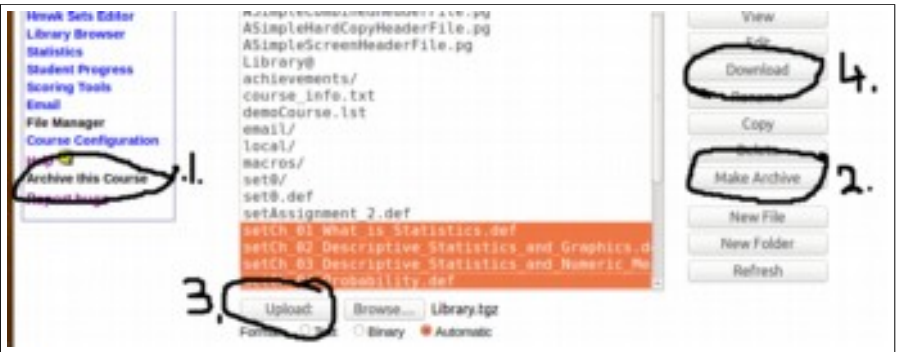
Where is Webwork?

It is important to recognize WeBWorK as existing as both files and directories, and a database.

The files are located at /opt/webwork ... and more specifically /opt/webwork/courses/... for the particular courses.

The database is actually stored at /var/lib/mysql/webwork but this is not important; the only important thing to remember is that the information is accessed differently. Generally all student data is located in the database.

In the “File Manager” we are interested in:

1. “Archive This Course” 2. “Make Archive” 3. “Upload” 4. “Download”	

1. “Archive This Course”: This makes an archive that is a complete snapshot of the course specifics (files and database). This can be moved to another WeBWorK installation (use latest versions) and the course is then recreated. A very recent archive could then be used to mitigate the effects of a hardware failure.

2. “Make Archive”: This compresses files and folders into a single archive making their download and upload easy. Note that student data is stored in the database and so “Make Archive” is not used for this.

3/4. “Upload” and “Download” work exactly as you would expect. Note that it does not matter what kind of system is doing the downloading/uploading: it can be a Microsoft machine.

Homework sets are lists of problems the students are tasked to do; they live in the database. Often we want to take a set from one course and incorporate it into a similar course. Sometimes we want to take all the sets used in the fall and use them again in the winter. To facilitate the movement of homework the “homework sets editor” has two features “Export” and “Import”. The “Export” button creates a file representing a homework set; this can then be moved as a file as discussed above. The “Import” button reverses the procedure: after the “homework set file” arrives at its destination the receiving database then imports it from the file system.	

Here are three situations we may find ourselves in.

1. A new statistics section is being added to an algebra course. John wishes to take several assignments from the statistics course and incorporate them in the algebra course.

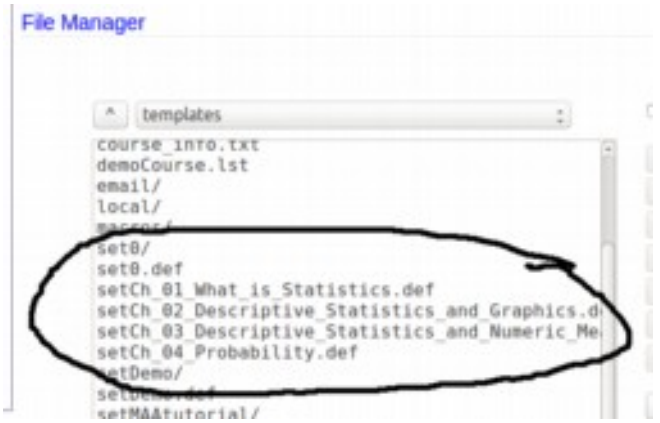
2. The hard drive on Janet's computer is failing. Janet needs to transfer her course to another machine with minimal disruption to the students.

3. Abdu wishes to deliver a couse exactly as he did the previous semester. He wants to delay deleting student information. He wishes a clone of the previous delivery without the students.

1. A new statistics section is being added to an algebra course. John wishes to take several assignments from the statistics course and incorporate them in the algebra course.

We do not need any student data; in fact it would be a liability. The only information we need from the database are the homework sets: we have the Export utility to retreive that.

"Set Definition Files" being exported from the database.



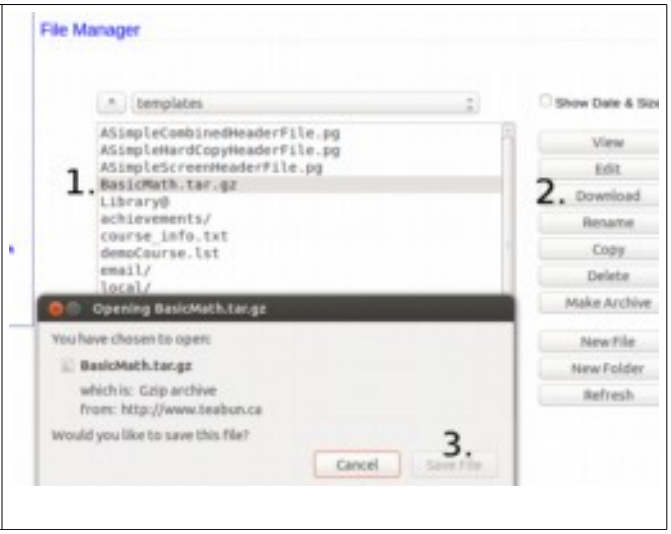
"Set Definition Files" after they have been exported from the database.

The "Set Definition Files" would then be Archived, Downloaded, Uploaded to their destination and Imported by the receiving database.

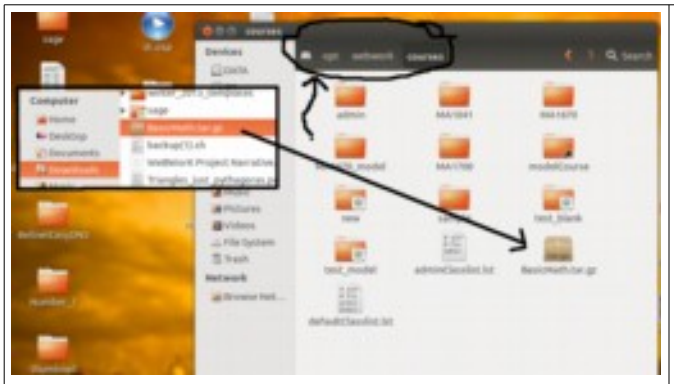
The homework sets have now been added. If the sets themselves were simply pointers to the OPL we would be done. Often the code for the problems are stored locally and these would then, also, need to be uploaded into their appropriate locations.

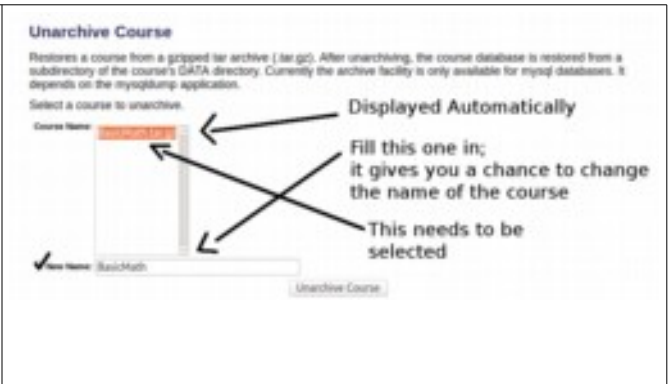
2. The hard drive on Janet's computer is failing. Janet needs to transfer her course to another machine with minimal disruption to the students.

Since we require everything we use “Archive this Course” (1). We then download the archive.



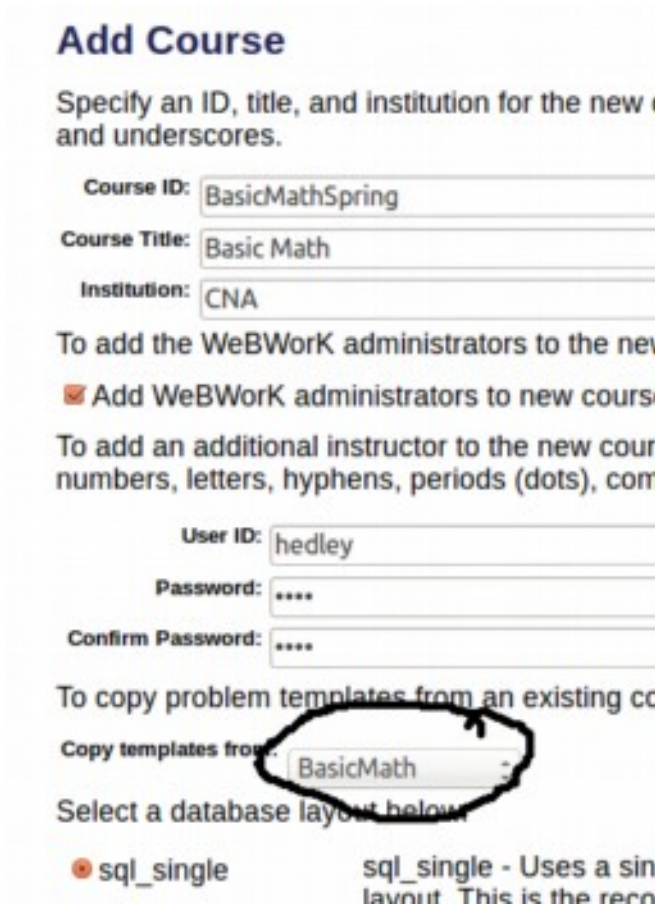
The archive is uploaded and placed in the /opt/webwork/courses directory. We then go into the admin course for the receiving installation and select “Unarchive Course”





3. Abdu wishes to deliver a couse exactly as he did the previous semester. He wants to delay deleting student information. He wishes a clone of the previous delivery without the students.

If you want to recreate the homework in the current course for a new course on the same machine you can do the following:

1. export all of the homework sets from course1. This exports the data knowledge about the contents of the homework sets to set definition files stored in course1/templates.	
	2. create course2 using course1 as the "template" instead of using modelCourse (this has to be done from the admin page of webwork -- a mere instructor can not do this.) This copies over all the files in the templates and html directories in course1 but not the database (that's why you have to export the homework sets first)

3. go to course2 and import homework set definitions (you can import them all at once)